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10/662,059	09/12/2003	Stephen Paul Lewontin	NOKM.059PA	8337

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EXAMINER

GOODCHILD, WILLIAM J

ART UNIT	PAPER NUMBER
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2145

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/662,059	Applicant(s) LEWONTIN, STEPHEN PAUL	
	Examiner WILLIAM J. GOODCHILD	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-9, 11-31 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheenath (US Publication No. 2004/0045004).

Regarding claim 1, Cheenath discloses determining a markup-language Web service message at a first network entity [paragraph 19] usable to invoke a remote procedure call at a second network entity [paragraphs 21 and 24], wherein the Web service message includes a variant [paragraph 21, parameters] portion that changes for repeated invocations of the remote procedure call and an invariant portion [paragraph 21, body] that does not change for the repeated invocations of the remote procedure call [paragraph 21];

forming a reduced message at the first network entity based on at least a variant portion of the Web service message [paragraph 25]; and

Art Unit: 2145

sending the reduced message targeted for the second network entity via a network to process the remote procedure call at the second network entity based on the reduced message [paragraph 25].

Regarding claim 2, Cheenath discloses the Web service message comprises a simple object access protocol message [paragraph 19].

Regarding claim 3, Cheenath discloses forming the reduced message comprises forming reference data based on the invariant portion of the Web service message and including the reference data in the reduced message [paragraphs 21 and 25].

Regarding claim 5, Cheenath discloses the reference data comprises a reference to a data store containing criteria for creating a reproduction of the invariant portion [paragraph 23].

Regarding claim 6, Cheenath discloses the reference to the data store comprises a Universal Resource Identifier (URI).

Regarding claim 7, Cheenath discloses forming a reproduction of the Web service message based on the reduced message [paragraph 25]; and processing the reproduction of the Web service message at the second network entity [paragraph 25].

Regarding claim 8, Cheenath discloses forming the reduced message comprises forming reference data based on an invariant portion of the Web service message and including the reference data in the reduced message [paragraphs 21-23].

Regarding claim 9, Cheenath discloses forming the reproduction of the Web service message comprises forming the reproduction of the Web service message from a reproduction of the invariant portion of the Web service message [paragraph 25].

Regarding claim 11, Cheenath discloses the reference data comprises a reference to a data store containing criteria for creating a reproduction of the invariant portion [paragraph 23].

Regarding claim 12, Cheenath discloses the reference to the data store comprises a Universal Resource Identifier (URI) [paragraph 8].

Regarding claim 13, Cheenath discloses a first data processing arrangement configured to determine a markup-language Web service message [paragraph 19] usable to invoke a remote procedure call via a network [paragraphs 21 and 24], wherein the Web service message includes a variant portion [paragraph 21] that changes for repeated invocations of the remote procedure call, and an invariant portion that does not change [paragraph 21] for the repeated invocations of the remote procedure call [paragraph 21],

Art Unit: 2145

the first data processing arrangement further configured to form and transmit, via the network, a reduced message based on at least the variant portion of the Web service message [paragraph 25],

a message processing arrangement coupled to receive the reduced message and transmit a reproduction of the Web service message based on the reduced message [paragraph 25]; and

a second data processing arrangement coupled to receive the reproduction of the Web service message and process the remote procedure call based on the reproduction of the Web service message [paragraph 25].

Regarding claim 14, Cheenath discloses the Web service message includes a simple object access protocol message [paragraph 25].

Regarding claim 15, Cheenath discloses the message processing arrangement includes a third data processing arrangement coupled to the first and second data processing arrangements via the network [paragraphs 24-26].

Regarding claim 16, Cheenath discloses the message processing arrangement includes a message processing module operable on the second data processing arrangement [paragraph 27].

Art Unit: 2145

Regarding claim 17, Cheenath discloses a first data processor configured to transmit a markup-language Web service message to invoke a remote procedure call via a network [paragraph 25], the Web service message including a variant portion that changes for repeated invocations of the remote procedure call [paragraph 21], and an invariant portion that does not change for the repeated invocations of the remote procedure call [paragraph 21];

a message processor configured to receive the Web service message [paragraph 21], form a reduced message based on at least the variant portion of the Web service message, and transmit the message to invoke the remote procedure call [paragraphs 19 and 25];

a second data processor configured to receive the reduced message and process the remote procedure call based on the reduced message [paragraph 27].

Regarding claim 18, Cheenath discloses the Web service message includes a simple object access protocol message [paragraph 19].

Regarding claim 19, Cheenath discloses the second data processor is further configured to form a reproduction of the Web service message based on the reduced message and transmit the reproduction of the Web service message, the messaging system further comprising a third data processor configured to receive the reproduction of the Web service message and process the remote procedure call based on the reproduction of the Web service message [paragraphs 19, 21 and 25].

Regarding claim 20, Cheenath discloses a data storage device having a criteria accessible by the message processor, the criteria used by the message processor to form the reduced message based at least on the variant portion of the Web service message [paragraphs 16-18].

Regarding claim 21, Cheenath discloses a memory capable of storing at least one of a messaging module and a Web services processing module [paragraph 16]; a processor coupled to the memory and configured by the messaging module [paragraph 28] to: form an outgoing reduced message based on at least a variant portion of a Web service message [paragraph 25] determined by the Web services processing module in response to invoking a remote procedure call via a network [paragraphs 19, 21 and 24], wherein the Web service message includes the variant portion that changes for repeated invocations of the remote procedure call [paragraph 21], and an invariant portion that does not change for the repeated invocations of the remote procedure call [paragraph 21]; and form a reproduced Web service message targeted for the Web services processing module based on an incoming reduced message from the network [paragraphs 24-25], wherein the incoming reduced message is formed based on at least an incoming variant portion of an externally determined markup language Web service message determined in response to invoking the remote procedure call [paragraph 25], wherein the externally determined Web service message includes the incoming variant portion that changes

Art Unit: 2145

for repeated invocations of the remote procedure call, and an externally determined invariant portion that does not change for the repeated invocations of the remote procedure call [paragraphs 19 and 21]; and

a transceiver capable of being wirelessly coupled to the network and configured to facilitate exchange of the incoming and outgoing reduced messages with a network element to invoke the remote procedure call [paragraph 25].

Regarding claim 22, Cheenath discloses the Web service messages include simple object access protocol messages [paragraph 19].

Regarding claim 23, Cheenath discloses determining a markup-language Web service message at a first network entity usable to invoke a remote procedure call at a second network entity [paragraph 19], wherein the Web service message includes a variant portion that changes for repeated invocations of the remote procedure call and an invariant portion that does not change for the repeated invocations of the remote procedure call [paragraph 21];

forming a reduced message at the first network entity based on at least a variant portion of the Web service message [paragraph 25];

sending the reduced message targeted for the remote data processing arrangement [paragraph 25]; and

Art Unit: 2145

receiving a response message from the remote data processing arrangement in response to an invocation of the remote procedure call based on the reduced message [paragraph 25].

Regarding claim 24, Cheenath discloses the response message comprises a reduced response message based on at least a variant portion of a Web service response message generated by the remote data processing arrangement, wherein the variant portion of the Web service response message changes for the repeated invocations of the remote procedure call [paragraphs 25-27].

Regarding claim 25, Cheenath discloses forming a reproduction of the Web service response message based on the reduced response message [paragraphs 19 and 24-27]; and

processing the reproduction of the Web service response message [paragraphs 19 and 214-27].

Regarding claim 26, Cheenath discloses the Web service message comprises a simple object access protocol message [paragraph 19].

Regarding claim 27, Cheenath discloses a network interface capable of communicating via a network [paragraphs 7 and 18];

a processor coupled to the network interface [paragraph 28]; and

Art Unit: 2145

memory coupled to the processor and having instructions that cause the processor [paragraph 16] to: receive a reduced message via the network based on at least a variant portion of a Web service message originating from a first terminal and targeted to invoke a remote procedure call at a second terminal, wherein the Web service message includes the variant portion that changes for repeated invocations of the remote procedure call, and an invariant portion that does not change for the repeated invocations of the remote procedure call [paragraphs 19, 21 and 25]; form a reproduction of the Web service message based on the reduced message [paragraph 25]; and send the reproduction of the Web service message to the second terminal via the network to invoke the remote procedure call [paragraph 25].

Regarding claim 28, Cheenath discloses the instructions further cause the processor to access a data store containing criteria for forming the reproduction of the Web service message based on the reduced message [paragraph 17].

Regarding claim 29, Cheenath discloses the Web service message comprises a simple object access protocol message [paragraph 19].

Regarding claim 30, Cheenath discloses means for forming an outgoing reduced message based on at least a variant portion of a markup language Web service message [paragraph 25] determined at the mobile terminal in response to invoking a

Art Unit: 2145

remote procedure call via a network [paragraphs 21 and 24], wherein the Web service message includes the variant portion that changes for repeated invocations of the remote procedure call, and an invariant portion that does not change for the repeated invocations of the remote procedure call [paragraphs 19, 21 and 24-25];

means for forming a reproduced Web service message based on incoming reduced messages from the network, wherein the incoming reduced message is formed based on at least an incoming variant portion of an externally determined markup language Web service message generated in response to invoking the remote procedure call, wherein the externally determined Web service message includes the incoming variant portion that changes for the repeated invocations of the remote procedure call, and an externally determined invariant portion that does not change for the repeated invocations of the remote procedure call [paragraphs 19, 21 and 24-25];

means for processing the reproduced Web service messages [paragraphs 19, 21 and 24-25]; and

means for facilitating exchange of the incoming and outgoing reduced messages with a network element to invoke the remote procedure call [paragraphs 19, 21 and 24-25].

Regarding claim 31, Cheenath discloses the Web service messages include simple object access protocol messages [paragraph 19].

Regarding claim 33, Cheenath discloses the apparatus comprises a server [paragraph 28].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheenath as applied to claims 1 and 8 above, and further in view of Kuznetsov (US Patent No. 6,772,413).

Regarding claims 4 and 10 Cheenath does not specifically disclose the reference data comprises a binary representation of the invariant portion. However, Kuznetsov discloses the use of binary representation of the data [Kuznetsov, column 17, lines 59-63]. It would have been obvious for one having ordinary skill in the art at the time the invention was made to include binary representation of the data in order to increase data transfer.

5. Claims 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheenath as applied to claims 21 and 30 above, and further in view of Multer et al., (US Publication No. 2002/0040369), (hereinafter Multer).

Art Unit: 2145

Regarding claims 32 and 34, Cheenath does not specifically disclose the apparatus comprises a mobile terminal. However, Multer in the same field of endeavor discloses a wireless personal computer [paragraph 8]. It would have been obvious for one having ordinary skill in the art at the time the invention was made to include a mobile system in order to provide the user with the flexibility of connecting wirelessly.

Response to Arguments

6. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2145

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
05/12/2008

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145